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EXAMINER	
RICHARDSON, THOMAS W	

ART UNIT	PAPER NUMBER
4121	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/760,441	YUAN ET AL.	
	Examiner	Art Unit	
	Thomas Richardson	4121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 January 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20 January 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-26 are pending for examination.

Claims 1-26 are rejected.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "225" in Figure 2 has been used to designate both "<place holder>" (page 9, line 6) and "data structure" (page 9, line 8).

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because Figure 6 does not include the following reference sign(s) mentioned in the description: "web page 400" (page 15, line 9).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: the disclosure is objected to because it contains an embedded hyperlink and/or other form

of browser-executable code. Hyperlink beginning with "http://www.petshop.com..." appears throughout document (page 10, lines 2, 7, 11; page 11, line 3; page 12, line 4; page 13, line 24; page 14, line 10; page 16, line 13). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims are for a computer-readable media, which is defined in the specification as including carrier signals or other data signals, which are not patentable material (page 19, lines 10-20).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21-26 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2003/0004998, Datta.

5. As per claim 21, Datta teaches a computer-readable media having a data structure (abstract, where the web page has structure) comprising:

a first data field containing items that are generated by a content server (page 10, paragraph [0113], where the content includes a template);

a second data field having a first set of tags associated with the items that are generated by the content server (page 10, paragraph [0113], where the content includes marker for a banner and personal greeting); and

a third data field having a second set of tags associated with items that are cached by a proxy server (page 10, paragraph [0113], where the content includes markers with the "get" command).

6. As per claim 22, Datta teaches the computer-readable media of Claim 21, wherein each tag in the first set includes at least one cache variation logic (CVL) attribute (page 6, paragraph [0079], where the content includes a personal greeting retrieved from a profile).

7. As per claim 23, Datta teaches the computer-readable media of Claim 22, wherein each tag in the first set includes at least one of a name, a key, a time to live (ttl) value, a master time to live (masterttl) value, a VaryByParam factor, a VaryByCustom factor and a VaryByHeader factor (page 10, paragraph [0113], where the data set includes a key).

8. As per claim 24, Datta teaches the computer-readable media of Claim 21, wherein each tag in the second set includes a key associated with an item that is

cached by the proxy server (page 10, paragraph [0113], where each marker can include a key).

9. As per claim 25, Datta teaches an apparatus comprising:

means for receiving a request for dynamic content that includes a plurality of items wherein at least one of the items is cached by a proxy (page 7, paragraph [0090], where the cache server receives a request for a web page);

means for requesting a content server to generate the items without disrupting the process workflow of the request (page 7, paragraph [0090], where the cache server forwards the request to the back end server); and

means for combining the generated items with the cached item (page 7, paragraph [0090], where the cache server assembles the data); and

means for sending the combined content to a destination in accordance with the request (page 7, paragraph [0090], where the cache server sends the data to the requester).

10. As per claim 26, Datta teaches the apparatus of Claim 25, further comprising:

means for generating at least one cacheable item and metadata associated with the cacheable item (page 9, paragraph [0110], where the "set" command is added to the content generated by the back end server); and

means for generating a policy for caching the cacheable item based on the metadata (page 9, paragraph [0112], where the "set" command causes the cache server to store the data).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0004998, Datta and US 2004/0068579, Marmigere et al.

11. As per claim 1, Datta teaches a method of communicating between two computing devices (Figure 3A, where users receive web pages from the system), the method comprising:

receiving, by a first computing device, a request for content that includes an item cached by the first computing device (page 7, paragraph [0090], where the dynamic cache server receives a request for a web page);

sending, by the first computing device to a second computing device, the request (page 7, paragraph [0090], where the cache server passes the request to the back end monitor);

receiving, by the first computing device from the second computing device, content generated by the second computing device (page 7, paragraph [0090], where the back end monitor performs processing and forwards the content back to the cache server);

combining, by the first computing device, the cached item and the generated content (page 7, paragraph [0090], where the cache server assembles the layout instructions); and

sending, by the first computing device, the combined content to a destination (page 7, paragraph [0090], where the cache server serves the web page).

Datta does not teach forwarding the request along with an identifier to the cached data. Marmigere teaches a distributed caching system where data is retrieved by a cache by means of identifiers. His system and method comprise:

sending, by a first device, an identifier associated with the cached item (page 6, paragraph [0060], where the proxy server asks the web content servers for the information the proxy does not have, identifying that content with the URL); and

receiving, by the first device from the second device, content based on the identifier (page 6, paragraph [0060], where the web server returns the requested content).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Datta's system with the caching identifiers given by Marmigere. It would be beneficial in terms of speed and efficiency to process in the proxy server, as in Marmigere's system, with the cache index table. This allows the cache server to request

only specific content from the content server (as in page 2, paragraph [0017], where the cache requests a selected object).

12. As per claim 2, the combination of Datta and Marmigere teaches the method of Claim 1, wherein the cached item includes at least one of a web page and a fragment (Datta teaches this limitation. Page 7, paragraph [0090], where the cache server contains objects such as fragments or page layouts).

13. As per claim 3, the combination of Datta and Marmigere teaches the method of Claim 1, wherein the identifier includes a cache key (Datta teaches this limitation. Page 10, paragraph [0113], where the template can include a key).

14. As per claim 4, the combination of Datta and Marmigere teaches the method of Claim 1, wherein the generated content includes a place holder to represent the cached item (Datta teaches this limitation. Page 9, paragraph [0110], where the generated content includes markers for the cached data).

15. As per claim 5, the combination of Datta and Marmigere teaches the method of Claim 1, further comprising incorporating, by the second computing device, in the generated content at least one cacheable item and metadata associated with the cacheable item (Datta teaches this limitation. Page 8, paragraph [0099], where the there is a key assigned to the cacheable data with instructions), and wherein the metadata enables the first computing device to cache the cacheable item (page 8, paragraph [0099], where the instructions include a "set" command).

16. As per claim 6, the combination of Datta and Marmigere teaches the method of Claim 5, further comprising deleting, by the first computing device, the metadata before

sending the combined content to the destination (Datta teaches this limitation. Page 8, paragraph [0102], where the set command is followed by the cache server, not included in the assembled content).

17. As per claim 7, the combination of Datta and Marmigere teaches the method of Claim 5, further comprising:

caching, by the first computing device, the cacheable item (Datta teaches this limitation. Page 8, paragraph [0102], where the cache server stores the data tagged with the "set" command); and

maintaining, by the first computing device, the cacheable item in accordance with the metadata (Datta teaches this limitation. Page 8, paragraph [0102], where the data is stored in the cache server).

18. As per claim 8, the combination of Datta and Marmigere teaches the method of Claim 5, further comprising: implementing, by the first computing device, a policy for caching the cacheable item based on the metadata (Datta teaches this limitation. Page 8, paragraph [0102], where the "set" command causes the cache to store the data).

19. As per claim 9, the combination of Datta and Marmigere teaches the method of Claim 5, wherein the metadata includes at least one of a name, a key, and information for identifying conditions under which the cacheable item may be cached (Datta teaches this limitation. Page 8, paragraph [0102], where the data generated includes a template, key, and "set" command).

20. As per claim 10, the combination of Datta and Marmigere teaches the method of Claim 1, wherein the generated content includes multiple items (Datta teaches this

limitation. Page 7, paragraph [0090], where the data includes payout instructions and some content).

21. As per claim 11, the combination of Datta and Marmigere teaches the method of Claim 1, wherein the first computing device is a proxy and the second computing device is a content server (Datta teaches this limitation. Page 7, paragraph [0090], where the system contains a proxy cache and a back end server).

22. As per claim 12, Datta teaches a system comprising:

a proxy server configured to process a request for content having items that are cached, the proxy server being further configured to forward the request (page 8, paragraph [0096], where the cacheable content is tagged); and

a content server configured to dynamically generate the content requested by the proxy server, the dynamically generated content having information for the proxy server to combine the dynamically generated content with the cached items for processing the request (page 10, paragraph [0113], where the content generated contains markers for the cached data).

Datta does not teach forwarding the request along with an identifier to the cached data. Marmigere teaches a distributed caching system where data is retrieved by a cache by means of identifiers. His system and method comprise:

forward identifiers associated with the cached items (page 6, paragraph [0060], where the proxy server sends a request to the content server for the data that is not contained at the proxy server).

23. As per claim 13, the combination of Datta and Marmigere teaches the system of Claim 12, wherein the dynamically generated content includes multiple items that are not cached by the proxy server (Datta teaches this limitation. Page 10, paragraph [0113], where the banner and greeting are generated each time by the back end server).

24. As per claim 14, the combination of Datta and Marmigere teaches the system of Claim 13, wherein the items include at least one of a web page and a fragment (Datta teaches this limitation. Page 9, paragraph [0109], where the web page contains multiple blocks that can be tagged or untagged).

25. As per claim 15, the combination of Datta and Marmigere teaches the system of Claim 12, wherein the information in the content includes place holders for inserting the items cached by the proxy server (Datta teaches this limitation. Page 9, paragraph [0110], where the content contains markers for cached data).

26. As per claim 16, the combination of Datta and Marmigere teaches the system of Claim 15, wherein the place holders include at least one substitution tag (Datta teaches this limitation. Page 10, paragraph [0113], where the "get" command inserts cached data into the page).

27. As per claim 17, the combination of Datta and Marmigere teaches the system of Claim 15, wherein the identifiers include cache keys and each place holder is identified with at least one of the cache keys (Datta teaches this limitation. Page 10, paragraph [0113], where each marker can include a key).

28. As per claim 18, the combination of Datta and Marmigere teaches the system of Claim 12, wherein a content server is further configured to generate cacheable items and metadata associated with the cacheable item in response to the request (page 9, paragraph [0110], where the "set" command can be added to generated data that is not in the cache), and wherein the proxy server is configured to cache the cacheable items in a computer-readable media and to use the cacheable items to process subsequent requests based on the metadata (Datta teaches this limitation. Page 9, paragraph [0112], where the "set" command stores the data in the cache server).

29. As per claim 19, the combination of Datta and Marmigere teaches the system of Claim 18, wherein the metadata includes at least one cache tag (Datta teaches this limitation. Page 9, paragraph [0111], where the data includes a key).

30. As per claim 20, the combination of Datta and Marmigere teaches the system of Claim 19, wherein the cache tag includes a key (Datta teaches this limitation. Page 9, paragraph [0111], where the data includes a key).

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2003/0177197, de Bonet, et al discloses a system to cache web pages with URL keys.

US 2003/0140100, Pullara discloses a system to use a fragment cache to ease the load of a server system.

US 7 159 014, Kausik et al discloses a system for using a proxy cache with URL tags.

US 2004/0098463, Shen et al discloses a system with a cache and method for retrieval of data from storage system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Richardson whose telephone number is (571) 270-5006. The examiner can normally be reached on Monday through Thursday, 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on (571) 272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TR

TAGHI ARANI
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10/17/04